

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2001-276016

(43)Date of publication of application : 09.10.2001

(51)Int.Cl. A61B 5/055  
G01R 33/48

(21)Application number : 2000-097632 (71)Applicant : HITACHI MEDICAL CORP

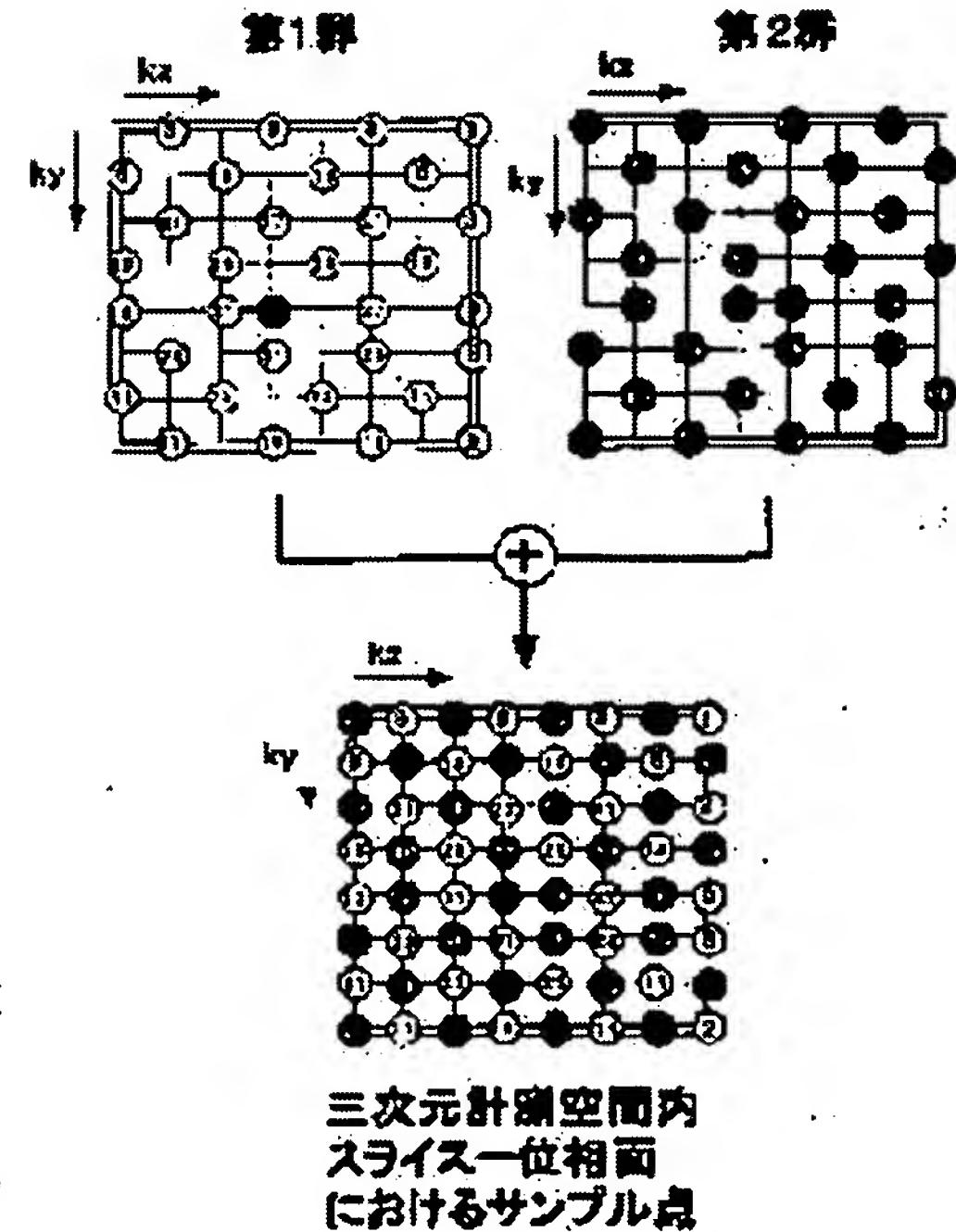
(22)Date of filing : 31.03.2000 (72)Inventor : WATABE SHIGERU

## (54) MAGNETIC RESONANCE EQUIPMENT

### (57)Abstract:

PROBLEM TO BE SOLVED: To plot a whole blood vessel with high contrast while reducing influence owing to the deviation of an image pickup timing and to selectively plot the image of an artery in contrast MRA measurement.

SOLUTION: Measurement points arranged in the respective grid points of a k-space which is stipulated by the number of slice encoding and the number of phase encoding are divided into two groups which share an origin point and which are in complex conjugate relation mutually and successively measured. The measurement of the first group is started at the point of time when the contrast media density of a target blood vessel becomes high, the measurement points are sampling-controlled toward a low frequency component from a high frequency component to permit a distance from the origin point to be gradually close and a part near the origin point is measured at the point of time when the peak of the density is obtained. In the second group, sampling points are sampling-controlled toward the high frequency component from the low frequency component to permit the distance to be gradually separated on the contrary. Then the density of the contrast media becomes its peak when the low frequency component is measured.



[Date of request for examination]

18.10.2004

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office